

PCT/IL04/00904 ..

PEAUS 19 JUL 2005

- 28 -

CLAIMS:

1. A method for screening and indicating individuals with hidden intent comprising:
 - 5 a) exposing an individual to at least one stimulus within at least one exposure timeframe while said timeframe is contemporary with individual's fulfillment of at least one stated assignment and said stimulus does not require an active direct reaction from the individual and is intended to cause a psycho-physiological reaction;
 - 10 b) registration of individual's psycho-physiological characteristics giving rise to registered parameters;
 - c) comparing the registered parameters or derivatives thereof with a test criterion;
 - d) providing indication of hidden intent in case of predefined discrepancy.
2. The method of Claim 1 wherein said hidden intent is malicious.
- 15 3. The method of Claims 1 or 2 wherein said stimulus does not form a part of said assignment.
4. The method according to any one of Claims 1 to 3 wherein said psycho-physiological reaction includes a behavioral reaction.
5. The method according to any one of Claims 1 to 4 wherein at least one said
20 stimulus is a member of a group comprising open and concealed stimuli.
6. The method according to any one of Claims 1 to 5 wherein at least one said stimulus is a member of a group comprising stressing and relaxing stimuli.

7. The method according to any one of Claims 1 to 6 wherein at least one said stimulus is a member of a group comprising stimuli creating conscious and sub-conscious reaction.
8. The method according to any one of Claims 1 to 7 wherein at least one said stimulus is a member of a group comprising targeted and general stimuli.
9. The method according to any one of Claims 1 to 8 wherein the provision of at least one of said stimuli is fully automated.
10. The method according to any one of Claims 1 to 9 wherein at least one said stimulus is a member of a group comprising stimuli provided via physical and virtual media.
11. The method according to any one of Claims 1 to 10 wherein said stimuli are grouped within the exposure timeframe in at least one dedicated set.
12. The method according to Claim 11 wherein at least one set of stimuli is dedicated to individual's authentication.
13. The method according to Claim 11 wherein at least one set of stimuli is dedicated to indicate countermeasures by individual.
14. The method according to any one of Claims 1 to 13 comprising random or pseudo-random selection of at least one type of said stimuli.
15. The method according to any one of Claims 1 to 14 comprising random or pseudo-random exposure of at least one of said stimuli within the exposure timeframe.
16. The method according to any one of Claims 1 to 14 comprising scheduled exposure of at least one of said stimuli within the exposure timeframe.

17. The method according to any one of Claims 1 to 16 wherein said test criterion includes a test pattern; the method further comprising adapting of said test pattern to the individual according to registered parameters.
18. The method according to Claim 17 comprising adapting said test pattern to parameters registered before the first exposure time frame.
19. The method according to Claim 17 comprising adapting said test pattern to parameters registered between exposure time frames.
20. The method according to Claim 17 comprising adapting said test pattern to parameters registered during exposure of a dedicated set of stimuli.
21. The method according to any one of Claims 1 to 20 comprising random or pseudo-random appearance of at least one exposure timeframe.
22. The method according to any one of Claims 1 to 20 comprising random or pseudo-random continuity of at least one exposure timeframe.
23. The method according to any one of Claims 1 to 20 wherein appearance and continuity of at least one exposure timeframe is scheduled.
24. The method according to any one of Claims 1 to 23 wherein said assignments include answering questions and at least one stimuli is flashing of at least one picture not related to the content of the questions.
25. A method for screening and indicating individuals with hidden intent comprising:
- a) exposing the individuals to at least two sets of stimuli within at least one exposure timeframe, while first set of stimuli is dedicated to cause a known in advance individual's response and the second is dedicated to indicate a hidden intent;

- b) registration of characteristics of response to such exposure giving rise to registered parameters;
- c) comparing the parameters or derivatives thereof registered during the exposure of the first set with the known in advance individual's response;
- 5 d) comparing the parameters or derivatives thereof registered during the exposure of the second set with a test criterion;
- e) providing an indication of hidden intent in case of predefined discrepancy.

26. The method according to Claim 25 wherein said comparison with the known in advance individual's response is provided for the purpose of an
10 individual's authentication.

27. The method according to Claim 25 or 26 wherein said comparison with the known in advance individual's response is provided for the purpose of indicating countermeasures by the individual.

28. The method according to any one of Claims 25 to 27 wherein each of said at
15 least one exposure timeframe is contemporary with individual's fulfillment of at least one stated assignment.

29. The method according to any one of Claims 25 to 28 wherein said first and second sets of stimuli are exposed in different exposure timeframes.

30. The method according to any one of Claims 25 to 28 wherein said first and
20 second sets of stimuli are exposed within the same exposure timeframes.

31. The method according to any one of Claims 25 to 30 wherein said hidden intent is malicious.

32. The method according to any one of Claims 25 to 31 wherein said psycho-physiological reaction includes a behavioral reaction.

IPEAUS 19 JUL 2005

33. The method according to any one of Claims 25 to 32 wherein at least one of said stimulus is a member of a group comprising open and concealed stimuli.
34. The method according to any one of Claims 25 to 33 wherein at least one of said stimulus is a member of a group comprising stressing and relaxing
5 stimuli.
35. The method according to any one of Claims 25 to 34 wherein at least one of said stimulus is a member of a group comprising stimuli creating conscious and sub-conscious reaction.
36. The method according to any one of Claims 25 to 35 wherein at least one of
10 said stimulus is a member of a group comprising targeted and general stimuli.
37. The method according to any one of Claims 25 to 36 wherein provision of at least one of said stimuli is fully automated.
38. The method according to any one of Claims 25 to 37 wherein at least one of said stimulus is a member of a group comprising stimuli provided via
15 physical and virtual media.
39. The method according to any one of Claims 25 to 38 comprising random or pseudo-random selection of a type of at least one of said stimuli.
40. The method according to any one of Claims 25 to 39 comprising random or pseudo-random exposure of at least one of said stimuli within the exposure
20 timeframe.
41. The method according to any one of Claims 25 to 39 comprising scheduled exposure of at least one of said stimuli within the exposure timeframe.
42. The method according to any one of Claims 25 to 41 wherein said test criterion includes a test pattern; the method further comprising adapting of
25 said test pattern to the individual according to registered parameters.

IPEA/US 19 JUL 2005,

- 33 -

43. The method according to any one of Claims 25 to 42 wherein said known in advance individual's response includes a test pattern; the method further comprising adapting said test pattern to the individual according to parameters registered in advance.
- 5 44. The method according to any one of Claims 25 to 43 comprising random or pseudo-random appearance of at least one exposure timeframe.
45. The method according to any one of Claims 25 to 44 comprising random or pseudo-random continuity of at least one exposure timeframe.
46. The method according to any one of Claims 25 to 45 wherein appearance and
10 continuity of at least one exposure timeframe is scheduled.
47. A system for screening and indicating individuals with hidden intent comprising:
- a) a working place for fulfillment of at least one stated assignment;
- b) a stimuli exposure block for exposure of at least one stimuli to said
15 working place, wherein the working place and the stimuli exposure block are adapted to facilitate an exposure to an individual of at least one stimulus contemporaneous with individual's fulfillment of at least one stated assignment, while said stimulus does not require an active direct reaction of the individual and is intended to cause a psycho-physiological reaction;
- 20 c) sensors and measuring tools block for registration of individual's psycho-physiological characteristics giving rise to registered parameters;
- d) databases block for storing of data related to screening and indication setup and execution. Said databases block includes:
- i) tools and sensors database comprising data about at least one stimuli
25 exposure tool and at least one sensors and measuring tools;

IPEA/US 19 JUL 2005

- ii) a stimuli database comprising at least one stimulus;
- iii) an exposure procedures database comprising at least one exposure scenario and accordingly psycho-physiological characteristics to be registered;
- 5 iv) an evaluation procedures database comprising at least one test criterion and at least one predefined discrepancy for said exposure scenario as well as at least one rule for evaluation of discrepancy between said registered parameters and test criterion.
- e) a processing block for processing and management of data stored in said
10 database block.

48. A computer program product comprising a computer useable medium having computer readable program code embodied therein for screening and indicating individuals with hidden intent the computer program product comprising a computer readable program code for causing the computer to:

- 15 a) expose an individual to at least one stimulus within at least one exposure timeframe while said timeframe is contemporary with individual's fulfillment of at least one stated assignment and said stimulus does not require an active direct reaction of the individual and is intended to cause a psycho-physiological reaction;
- 20 b) registration of individual's psycho-physiological characteristics giving rise to registered parameters;
- c) comparing the registered parameters or derivatives thereof with a test criterion;
- d) providing indication of hidden intent in case of predefined discrepancy.

IPEAUS 19 JUL 2005

49. A computer program product comprising a computer useable medium having computer readable program code embodied therein for screening and indicating individuals with hidden intent the computer program product comprising computer readable program code for causing the computer to:

- 5 a) expose the individuals to at least two sets of stimuli within at least one exposure timeframe while first set of stimuli is dedicated to cause a known in advance individual's response and the second is dedicated to indicate a hidden intent;
- 10 b) registration of characteristics of response to such exposure giving rise to registered parameters;
- c) comparing the parameters or derivatives thereof registered during the exposure of the first set with the known in advance individual's response;
- d) comparing the parameters or derivatives thereof registered during the exposure of the second set with a test criterion;
- 15 e) providing an indication of hidden intent in case of predefined discrepancy.

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☒ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☒ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.